

- you improve the resolving power of a telescope?
- Q-6** **Attempt all questions** **(14)**
- a) Give the differences between dispersive and resolving power of a grating. **7**
 - b) Deduce the expression for resolving power of a microscope **7**
- Q-7** **Attempt all questions** **(14)**
- a) Discuss the method of determining wavelength of a spectral line using transmission grating. **8**
 - b) Differentiate between Zone plate and convex lens **6**
- Q-8** **Attempt all questions** **(14)**
- a) Explain in detail Rayleigh's Criterion for resolution. **8**
 - b) A grating has 6000 lines per cm. Find the angular separation of two yellow lines of mercury of wavelengths 5770\AA and 5791\AA in the second order **6**

